

Southern California Association of Governments

## Transportation Finance Task Force

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### CTC Coordination Revenue and Cost Model

Los Angeles, CA  
June 14, 2006

System Metrics Group, Inc.

#### Introduction

### Since our last Finance Task Force meeting, we have...

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- Spoken with representatives of each County Transportation Commission (CTC) about:
  - Constrained project lists and costs
  - Revenue forecasts
- Thought about implications for the model, such as
  - Need to handle diverging assumptions
  - Potential sales tax measures
  - Different end dates for long-range plans

## We interviewed people at every CTC plus IVAG and Metrolink

Organization	Representative(s)
Imperial Valley Association of Governments (IVAG)	Rosa Lopez, <i>Staff</i>
Los Angeles County Metropolitan Transportation Authority (LACMTA)	Gloria Anderson, <i>Long Range Planning</i> Doug Kim, <i>Long Range Planning</i> Ron Smith, <i>Transportation Funding</i>
Orange County Transportation Authority (OCTA)	Richard Marcus, <i>Planning and Development</i> Darrell Johnson, <i>Capital Programs</i>
Riverside County Transportation Commission (RCTC)	Shirley Medina, <i>Program Management</i>
San Bernardino Associated Governments (SANBAG)	Ty Schuiling, <i>Planning and Programming</i>
Ventura County Transportation Commission (VCTC)	Peter De Haan, <i>Transportation Programming, Legislation, and Grants</i>
Southern California Regional Rail Authority (Metrolink)	Joanna Capelle, <i>Grants and Strategic Development</i>

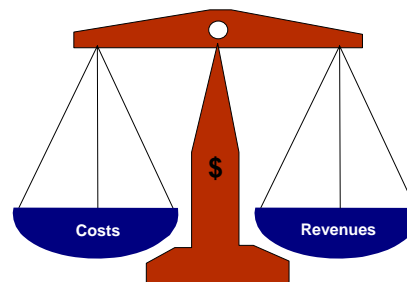
## We asked about both revenues and project costs

### Revenues

- What are your primary revenue sources?
- How do you forecast revenue (i.e., sources, forecast year, discounting, drivers, etc.)?
- What are the primary issues that will impact future revenue?
- What documentation can we review?

### Costs

- What is the programming horizon for your latest long-range plan?
- What is appropriate source of projects for your county?
- How will you propose projects for the last years of the Regional Transportation Plan (RTP)?



## We also collected a number of documents

- Long-Range Transportation Plans (LRTPs)
- Short-Range Transportation Plans (SRTPs)
- Summaries of financial forecasts
- Forecasting model documentation
- Guides to revenue sources
- Sale tax measure forecasts and expenditure plans
- Short-range transit plans and strategic plans

## We found that...

- The degree of forecasting varies by county
- Forecasts are based on actual and estimated apportionments/allocations for the SAFETEA-LU period (2005-2009)
- Most long-range plans go through 2030
- Some counties rely on outside forecasts (by UCLA, SCAG, Caltrans, etc.)
- Forecasts may not be consistent across revenue sources (e.g., different forecasts for sales tax measures and Transportation Development Act)
- Sales tax assumptions diverge (increasing per capita spending versus constant growth)
- The county LRTPs do not fully reflect Metrolink's Capital Plan
- The county financial forecasts may assume a different population and business growth than the regional travel demand model

## **The agencies make different forecasting assumptions**

- Ability to meet air quality attainment goals
- Impacts of additional transit revenue-miles
- Inclusion of debt service (financing costs)
- Use of nominal or constant dollars

## **The interviews also highlighted a few developments since the 2004 RTP**

- Sales tax measure did not pass in Ventura County (may attempt again right after adoption of the next RTP in 2008)
- Expiration of Imperial County sales tax measure in 2009 and current marketing effort for renewal
- Proposition 42 subvention
- Decline in federal trust fund balance

Task Name	Oct 1, 2006	Oct 2, 2006	Oct 3, 2006	Oct 4, 2006	Oct 5, 2006	Oct 6, 2006	Oct 7, 2006	Oct 8, 2006	Oct 9, 2006	Oct 10, 2006	Oct 11, 2006	Oct 12, 2006	Oct 13, 2006	Oct 14, 2006	Oct 15, 2006	Oct 16, 2006	Oct 17, 2006	Oct 18, 2006	Oct 19, 2006	Oct 20, 2006	Oct 21, 2006	Oct 22, 2006	Oct 23, 2006	Oct 24, 2006	Oct 25, 2006	Oct 26, 2006	Oct 27, 2006	Oct 28, 2006	Oct 29, 2006	Oct 30, 2006	Oct 31, 2006	Nov 1, 2006	Nov 2, 2006	Nov 3, 2006	Nov 4, 2006	Nov 5, 2006	Nov 6, 2006	Nov 7, 2006	Nov 8, 2006	Nov 9, 2006	Nov 10, 2006	Nov 11, 2006	Nov 12, 2006	Nov 13, 2006	Nov 14, 2006	Nov 15, 2006	Nov 16, 2006	Nov 17, 2006	Nov 18, 2006	Nov 19, 2006	Nov 20, 2006	Nov 21, 2006	Nov 22, 2006	Nov 23, 2006	Nov 24, 2006	Nov 25, 2006	Nov 26, 2006	Nov 27, 2006	Nov 28, 2006	Nov 29, 2006	Nov 30, 2006	Dec 1, 2006	Dec 2, 2006	Dec 3, 2006	Dec 4, 2006	Dec 5, 2006	Dec 6, 2006	Dec 7, 2006	Dec 8, 2006	Dec 9, 2006	Dec 10, 2006	Dec 11, 2006	Dec 12, 2006	Dec 13, 2006	Dec 14, 2006	Dec 15, 2006	Dec 16, 2006	Dec 17, 2006	Dec 18, 2006	Dec 19, 2006	Dec 20, 2006	Dec 21, 2006	Dec 22, 2006	Dec 23, 2006	Dec 24, 2006	Dec 25, 2006	Dec 26, 2006	Dec 27, 2006	Dec 28, 2006	Dec 29, 2006	Dec 30, 2006	Dec 31, 2006	Jan 1, 2007	Jan 2, 2007	Jan 3, 2007	Jan 4, 2007	Jan 5, 2007	Jan 6, 2007	Jan 7, 2007	Jan 8, 2007	Jan 9, 2007	Jan 10, 2007	Jan 11, 2007	Jan 12, 2007	Jan 13, 2007	Jan 14, 2007	Jan 15, 2007	Jan 16, 2007	Jan 17, 2007	Jan 18, 2007	Jan 19, 2007	Jan 20, 2007	Jan 21, 2007	Jan 22, 2007	Jan 23, 2007	Jan 24, 2007	Jan 25, 2007	Jan 26, 2007	Jan 27, 2007	Jan 28, 2007	Jan 29, 2007	Jan 30, 2007	Jan 31, 2007	Feb 1, 2007	Feb 2, 2007	Feb 3, 2007	Feb 4, 2007	Feb 5, 2007	Feb 6, 2007	Feb 7, 2007	Feb 8, 2007	Feb 9, 2007	Feb 10, 2007	Feb 11, 2007	Feb 12, 2007	Feb 13, 2007	Feb 14, 2007	Feb 15, 2007	Feb 16, 2007	Feb 17, 2007	Feb 18, 2007	Feb 19, 2007	Feb 20, 2007	Feb 21, 2007	Feb 22, 2007	Feb 23, 2007	Feb 24, 2007	Feb 25, 2007	Feb 26, 2007	Feb 27, 2007	Feb 28, 2007	Feb 29, 2007	Feb 30, 2007	Mar 1, 2007	Mar 2, 2007	Mar 3, 2007	Mar 4, 2007	Mar 5, 2007	Mar 6, 2007	Mar 7, 2007	Mar 8, 2007	Mar 9, 2007	Mar 10, 2007	Mar 11, 2007	Mar 12, 2007	Mar 13, 2007	Mar 14, 2007	Mar 15, 2007	Mar 16, 2007	Mar 17, 2007	Mar 18, 2007	Mar 19, 2007	Mar 20, 2007	Mar 21, 2007	Mar 22, 2007	Mar 23, 2007	Mar 24, 2007	Mar 25, 2007	Mar 26, 2007	Mar 27, 2007	Mar 28, 2007	Mar 29, 2007	Mar 30, 2007	Mar 31, 2007	Apr 1, 2007	Apr 2, 2007	Apr 3, 2007	Apr 4, 2007	Apr 5, 2007	Apr 6, 2007	Apr 7, 2007	Apr 8, 2007	Apr 9, 2007	Apr 10, 2007	Apr 11, 2007	Apr 12, 2007	Apr 13, 2007	Apr 14, 2007	Apr 15, 2007	Apr 16, 2007	Apr 17, 2007	Apr 18, 2007	Apr 19, 2007	Apr 20, 2007	Apr 21, 2007	Apr 22, 2007	Apr 23, 2007	Apr 24, 2007	Apr 25, 2007	Apr 26, 2007	Apr 27, 2007	Apr 28, 2007	Apr 29, 2007	Apr 30, 2007	May 1, 2007	May 2, 2007	May 3, 2007	May 4, 2007	May 5, 2007	May 6, 2007	May 7, 2007	May 8, 2007	May 9, 2007	May 10, 2007	May 11, 2007	May 12, 2007	May 13, 2007	May 14, 2007	May 15, 2007	May 16, 2007	May 17, 2007	May 18, 2007	May 19, 2007	May 20, 2007	May 21, 2007	May 22, 2007	May 23, 2007	May 24, 2007	May 25, 2007	May 26, 2007	May 27, 2007	May 28, 2007	May 29, 2007	May 30, 2007	May 31, 2007	Jun 1, 2007	Jun 2, 2007	Jun 3, 2007	Jun 4, 2007	Jun 5, 2007	Jun 6, 2007	Jun 7, 2007	Jun 8, 2007	Jun 9, 2007	Jun 10, 2007	Jun 11, 2007	Jun 12, 2007	Jun 13, 2007	Jun 14, 2007	Jun 15, 2007</
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graph LR; subgraph "Revenue and Cost Models"; B3[Revenue Forecast Model] -- "+" --> B2[Baseline/Plan Cost Model]; B2 -- "=" --> BF[Baseline/Plan Financial Forecast]; end; BF -- "Gap Analysis" --> C2[Plan Financing Options]; C1[Alternative Funding Strategies] -- "Gap Analysis" --> C2; C2 --> B4[Financial Plan];
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Task B-3

Task B-2

Revenue and Cost Models

Revenue Forecast Model

+

Baseline/Plan Cost Model

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Baseline/Plan Financial Forecast

Gap Analysis

Task C-1

Alternative Funding Strategies

Task C-2

Plan Financing Options

Task B-4

Financial Plan

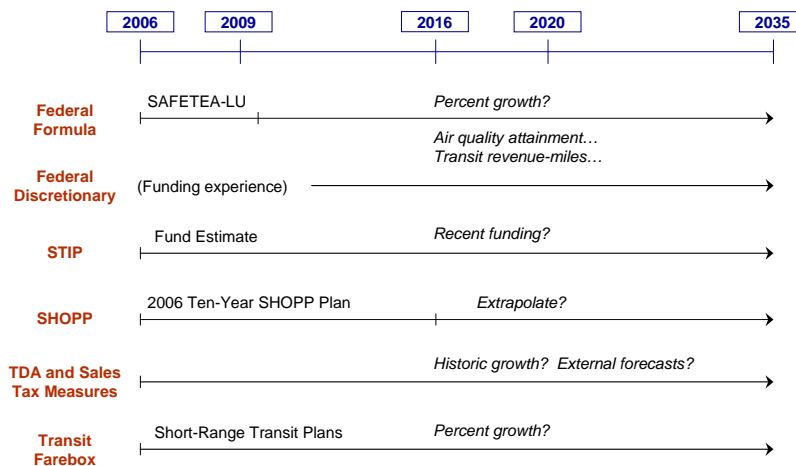
Tasks B-1 and C-3

Research

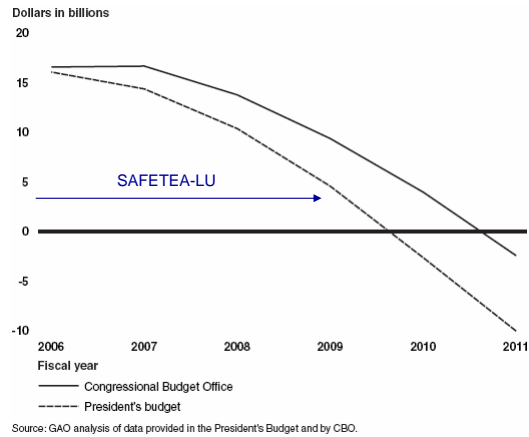
## The revenue forecast model will include the primary transportation funding sources in the SCAG region

Federal	State	Local
Surface Transportation Program (STP)	State Transportation Improvement Program (STIP)	Transportation Development Act (TDA)
Congestion Mitigation and Air Quality Program (CMAQ)	State Highway Operation and Protection Program (SHOPP)	Sales Tax Measures
Transportation Enhancement Activities (TEA)	State Transit Assistance (STA)	Developer Mitigation Fees
5307 & 5311 Formula Funds	Traffic Congestion Relief Program (TCRP)/Proposition 42	Transit Revenue (Farebox)
5309 New Starts & Bus Discretionary Funds		
5309 Fixed Guideway Formula		
5310 Paratransit Formula Funds		

## After the initial SAFETEA-LU period, revenue forecasts become less certain

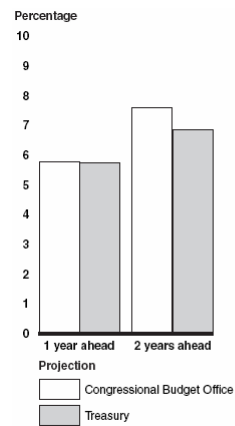


## A recent concern is that the Federal Highway Trust Fund will become negative due to SAFETEA-LU



## However, recent GAO testimony suggests that the accuracy of Highway Trust Fund estimates diminish for future years...

### Accuracy of Estimates Made in 1998-2004 for Highway Trust Fund Receipts



...which suggests that the shortfall is close to the forecasting margin of error

Highway Account Receipt and Outlay Estimates for  
2006 through 2011, as of March 1, 2006

Estimates Dollars in Billions

		2006	2007	2008	2009	2010	2011	Average 2006-2011
Treasury/DOT	Receipts	\$34.1	\$34.6	\$35.4	\$36.2	\$36.9	\$37.6	\$35.8
	Outlays	\$34.5	\$38.2	\$39.7	\$40.8	\$41.8	\$42.3	\$39.6
	Difference	-\$0.40	-\$3.60	-\$4.30	-\$4.60	-\$4.90	-\$4.70	-\$3.80
CBO	Receipts	\$34.9	\$35.9	\$36.9	\$37.9	\$38.8	\$39.7	\$37.4
	Outlays	\$34.9	\$37.9	\$40.5	\$41.7	\$42.7	\$43.8	\$40.3
	Difference	\$0.00	-\$1.94	-\$3.58	-\$3.81	-\$3.89	-\$4.07	-\$2.90

Source: GAO analysis of data provided by DOT and CBO.

Congress is reviewing the accuracy of USDOT and CBO estimates and the impact of SAFETEA-LU expenditures

There are a number of transit operators in the SCAG region

County	ID	Transit Operator	Total All Modes
LA	9008	Santa Monica's Big Blue Bus	73,003,534
	9010	City of Torrance Transit System	22,358,633
	9022	Norwalk Transit System	10,023,641
	9023	Long Beach Public Transportation Company	71,060,857
	9024	City of La Mirada Transit	170,220
	9039	Culver City Municipal Bus Lines	15,980,785
	9041	Montebello Bus Lines	33,993,300
	9042	City of Gardena Transportation Department	18,060,171
	9043	City of Commerce Municipal Bus	2,702,480
	9044	Arcadia Transit	508,065
	9121	Antelope Valley Transit Authority	38,236,671
	9146	Foothill Transit	100,130,693
	9147	City of Los Angeles Department of Transportation (LADOT)	83,104,561
	9154	Los Angeles County MTA	1,663,158,075
	9157	Access Services Incorporated	27,432,120
	9166	LACMTA small operators	24,737,111
	9171	Santa Clarita Transit	40,890,793
		<b>LA COUNTY TOTAL</b>	<b>2,225,551,706</b>
OR	9036	Orange County Transportation Authority	278,750,826
	9119	Laguna Beach	626,751
		<b>OR COUNTY TOTAL</b>	<b>279,377,577</b>
RV	9031	Riverside Transit Agency	44,510,985
	9052	City of Corona Dial-A-Ride	782,008
	9079	Sunline	29,969,789
	9086	City of Riverside Special Transportation	669,853
		<b>RV COUNTY TOTAL</b>	<b>75,932,645</b>
SB	9029	Omnitrans	81,578,755
	9148	Victor Valley Transit Authority	12,207,981
		<b>SB COUNTY TOTAL</b>	<b>93,786,736</b>
VE	9035	South Coast Area Transit	20,267,968
	9050	Simi Valley Transit	2,413,965
	9164	Ventura InterCity Service Transit Authority (VISTA)	6,021,209
	9165	Thousand Oaks Transit	1,222,757
		<b>VE COUNTY TOTAL</b>	<b>29,925,900</b>
VAR	9151	Southern California Regional Rail Authority (Metrolink)	364,526,307
		<b>REGIONAL TOTAL</b>	<b>3,069,100,871</b>

Source: National Transit Database



## Revenue Model



### We will focus on estimating farebox revenues for the large operators only...

- Santa Monica Big Blue Bus
- Long Beach Public Transportation Company
- Montebello Bus Lines
- Antelope Valley Transit Authority
- Foothill Transit
- City of Los Angeles Department of Transportation (LADOT)
- Los Angeles County MTA
- Santa Clarita Transit
- Orange County Transportation Authority
- Riverside Transit Agency
- Sunline
- Omnitrans
- South Coast Area Transit
- Southern California Regional Rail Authority (Metrolink)

### And make a lump-sum estimate for the other operators

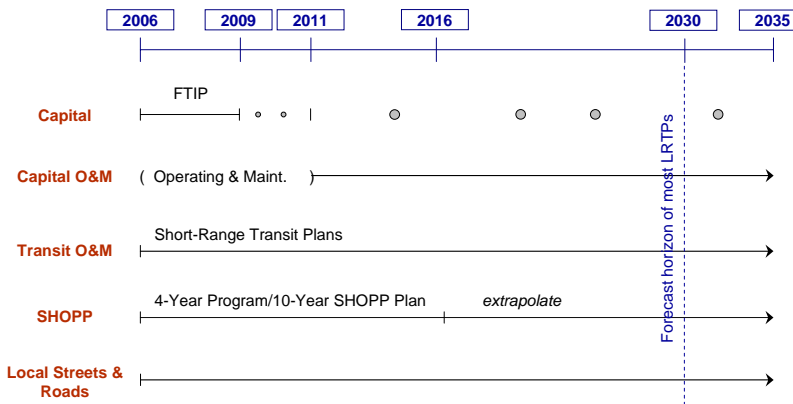
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## Cost Model



### For the cost model and assessment, we need to identify baseline and planned projects



### We may also have to find projects for the period not covered by county LRTPs (from 2030 to 2035)

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## Cost Model



# SCAG is collecting more detailed cost information for the 2007/2008 RTP

## 1. Project Costs by Category

Project Costs by Category			
Engineering (07\$)	Right-of-Way (07\$)	Construction (07\$)	Total Costs (07\$)
\$2,000,000	\$4,000,000	\$49,000,000	\$55,000,000

## 2. Project Expenditures by Funding Source

Expenditures by Funding Source								
Federal Funding (07\$)	Federal Funding Source (if known)	State Funding (07\$)	State Funding Source (if known)	Local Funding (07\$)	Local Funding Source (if known)	Private Funding (07\$)	Total Funding (07\$)	Funding Comments
\$45,000,000	FHWA CMAC	\$7,000,000	STIP	\$3,000,000	Other	\$0	\$55,000,000	

## Cost Model



# We will need to consider the impact of recent increases in construction costs on our long-term forecast



Source: SANBAG Analysis